IN THE CLAIMS:

Please amend Claim 41 as follows:

1-29 (Canceled)

30. (Previously Presented) An optical information reproducing apparatus for recording or reproducing information by controlling rotation of an optical disk so as to provide a constant linear velocity by changing a rotation frequency in accordance with a radial-direction position of an optical spot, said apparatus comprising:

a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof;

a focusing servo control circuit and a tracking servo control circuit for the optical spot; and

a circuit configured to adjust a servo-loop gain of a tracking servo control in accordance with the change of the disk rotation frequency,

wherein said circuit configured to adjust the servo-loop gain of tracking servo control adjusts the servo-loop gain so that when a servo gain at a highest rotation frequency Wmax is represented by Gmax, and a rotation frequency is represented by Wcurr, a servo gain Gcurr satisfies the following relationship:

$$Gcurr = Gmax \times (Wcurr/Wmax)^2$$

31. (Previously Presented) An optical information reproducing apparatus for recording or reproducing information by controlling rotation of an optical disk so as to provide a constant linear velocity by changing a rotation frequency in accordance with a radial-direction

position of an optical spot, said apparatus comprising:

a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof;

a focusing servo control circuit and a tracking servo control circuit for the optical spot; and

a circuit configured to adjust a servo-loop gain of a tracking servo control in accordance with the change of the disk rotation frequency,

wherein said focusing servo control circuit comprises a circuit configured to adjust the servo-loop gain of focusing servo control, and wherein when said circuit configured to adjust the servo-loop gain of tracking servo control changes the servo-loop gain of the tracking servo control with a predetermined ratio, said circuit configured to adjust the servo-loop gain of focusing servo control changes the servo-loop gain of focusing servo control with a ratio proportional to the root of the predetermined ratio.

32 (Canceled)

33 (Canceled)

34 (Canceled)

35 (Canceled)

36 (Canceled)

37 (Canceled)

38 (Canceled)

39 (Canceled)

40 (Previously Presented) An optical information reproducing apparatus for recording or reproducing information using an optical spot by controlling rotation of an optical disk so as to

provide a constant linear velocity by changing a rotation frequency in accordance with a radial-direction position of the optical spot, said apparatus comprising:

a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof;

a focusing servo control circuit and a tracking servo control circuit for the optical spot; and

a circuit configured to adjust a servo-loop gain of a focus servo control in accordance with the change of the disk rotation frequency,

wherein said circuit configured to adjust the servo-loop gain of focusing servo control adjusts the servo-loop gain so that when a servo gain at a highest rotation frequency Wmax is represented by Gmax, and a rotation frequency is represented by Wcurr, a servo gain Gcurr satisfies the following relationship:

$$Gcurr = Gmax \times Wcurr/Wmax$$

41. (Currently Amended) An optical information reproducing apparatus for recording or reproducing information using an optical spot by controlling rotation of an optical disk so as to provide a constant linear velocity by changing a rotation frequency in accordance with a radial-direction position of the optical spot, said apparatus comprising:

a circuit configured to control rotation of the optical disk by changing a rotation frequency thereof;

a focusing servo control circuit and a tracking servo control circuit for the optical spot; and

a circuit configured to adjust a servo-loop gain of a focus servo control in

accordance with the change of the disk rotation frequency,

wherein said tracking servo control circuit comprises a circuit configured to adjust the servo-loop gain of tracking servo control, and wherein when said circuit configured to adjust the servo-loop gain of the focusing servo control changes the servo-loop gain of focusing servo control with a predetermined ratio, said circuit configured to adjust the servo-loop gain of tracking servo control changes the servo-loop gain of tracking servo control with a ratio proportional to the ~~root~~ square of the predetermined ratio.

42. (Canceled)

43. (Canceled)

44. (Canceled)